EXHIBIT C

UNREDACTED PUBLIC VERSION

IN THE UNITED STATES DISTRICT COURT

IN AND FOR THE DISTRICT OF DELAWARE

- - -

INGENICO INC.,

Plaintiff,

v

IOENGINE, LLC,

Defendant.

IOENGINE, LLC,

Counterclaim Plaintiff,

v

INGENICO INC., INGENICO CORP. and INGENICO GROUP SA,

Counterclaim Defendants.

: CIVIL ACTION

: NO. 18-826-WCB

- - -

Wilmington, Delaware
Wednesday, July 13, 2022
Jury Trial - Volume C

- - -

BEFORE: HONORABLE WILLIAM C. BRYSON, and a jury
United States Circuit Court Judge

- - -

(Appearances in their entirety placed beginning on page 2)

Reported by:

Brian P. Gaffigan
Registered Merit Reporter
Federal Certified Realtime Reporter

APPEARANCES:

SMITH, KATZENSTEIN & JENKINS LLP
BY: NEAL C. BELGAM, ESQ., and
EVE H. ORMEROD, ESQ.

and

DECHERT LLP
BY: NOAH M. LEIBOWITZ, ESQ.
And, GREGORY T. CHUEBON, ESQ.
(New York, New York)

and

DECHERT LLP
BY: DEREK J. BRADER, ESQ.,
And, LUKE M. REILLY, ESQ.
(Philadelphia, Pennsylvania)

and

DECHERT LLP
BY: MICHAEL H. JOSHI, ESQ.
(Mountain View, California)

Counsel on behalf of IOENGINE, LLC

RICHARDS, LAYTON & FINGER, P.A.
BY: FREDERICK L. COTTRELL, III, ESQ.
And, CHRISTINE DEALY HAYNES, ESQ.

and

SUNSTEIN LLP
BY: KERRY L. TIMBERS, ESQ.
JOEL L. LEEMAN, ESQ.
SHARONA H. STERNBERG, ESQ.
And, KEVIN R. MOSIER, ESQ.
(Boston, Massachusetts)

Counsel for Plaintiff Ingenico Inc., Counterclaim Defendants Ingenico Corp. and Ingenico Group S.A.

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P R O C E E D I N G S

(REPORTER'S NOTE: The following jury trial was held in open court, beginning at 8:59 a.m.)

THE COURT: Where are we at this point? Do you expect to rest your case?

MS. STERNBERG: Yes. We have some videos and, well, Mr. Geier might come back for rebuttal at the end.

THE COURT: Right. Understood. Now, one thing I neglected to -- I'll raise it when Mr. Liebowitz comes back. I -- something I neglected to do.

MR. TIMBERS: I just wanted to raise an issue with the jurors. We noticed the line coming in, as Your Honor knows, is quite long, and the jurors seem unclear about how they can get in quickly. We noticed some jurors in the line today, and they are allowed to go around to the fast lane and we might want to -- and there is also a side door, I think, that they can use.

THE COURT: Well, that's --

MR. TIMBERS: I don't know. I just noticed jurors are in a long line.

(The Court and Deputy Clerk confer.)

THE COURT: Ms. Grimes said they can't use the side door.

MR. TIMBERS: Oh, okay.

may have heard of, maybe you don't know what they are but I didn't at the time either.

But I started using that. I thoroughly enjoyed that part of it, the hands-on working with electronics and that kit gave me sort of a lifelong passion for the hands-on side of technology, actually implementing, building, you know, making products.

Q. **So what kind of work experience do you have in terms of communications systems, generally?**

A. **My work experience, I have 35-40 years of experience working with analyzing, designing and implementing communications systems.**

Q. **So what do you mean by a "communications system"?**

A. **A communication system is a system that is able to transport data or information from one point to another electronically.**

Q. **So what experience have you had with portable devices?**

A. **Probably -- I have had a lot of experience with portable devices with I'd say 100 different types of portable devices. Probably one that I really like to talk about is -- it's in my CV. I used to work for a company called Monarch Marking Systems. And Monarch Marking Systems is actually, kind of interesting, was the maker of the very**

first price marking equipment. It was the late 1800s.

It was simply taking a piece of paper and sticking a needle through it, through clothing but it was done automatically so people wouldn't have to stick their fingers in it, that sort of thing.

But, of course, I didn't work with the company then. I worked with the company starting around mid-1990s but anyway, the portable devices I worked on at Monarch were used for all sorts of applications. One especially that I did work on was called the Pathfinder.

The Pathfinder was a handheld device, a portable device that had a processor that would run applications. T had a scanner built in so you could use that scanner. You might see in grocery scores and other places where they take a scanner and they scan an item, the barcode on a product. So it had a scanner. There was a little keypad and display on that product, very small. It also communicated to -- through a network to servers.

So that was a type of portable device that's sort of representative of the time of devices I worked on through my career over the last, I'd say 30 years since then.

Q. What was that time frame that you worked at Monarch?

A. At Monarch, I started -- let me think just a

minute. I started there I believe in 1996 and I left there in 2000.

Q. And what experience have you had with databases?

A. I'm sorry. What was the question?

Q. I'm sorry. What experience have you had with databases?

A. Okay. With databases, lots of experience. Again, I've talked about the idea I had to do a lot of hands-on work. I have implemented many databases. For example, with Monarch, any of our applications that we sold to various consumers like Wal-Mart and Best Buy, they needed databases to store their price marking information. Prices that relate to different products.

We also sold inventory applications. So I was responsible then for not only designing but implementing, by myself actually, developing the databases for those type of applications.

Through my career -- I joined the military too when I was younger and in my military career I also worked with databases and overseeing the development of databases.

Q. So what do you mean by "databases," just so everybody understands what that means?

A. Yes. Probably important for the jury to understand that because it certainly is part of one of the claims here.

A database is an organized collection of records and a database would typically be on a server which might be a PC or maybe kind of a high-end PC, some sort of computer that can serve up the data at whatever speed is needed based on the size of the database.

Q. **And what experience have you had regarding authentication of devices or verification of devices?**

A. **Yeah. Authentication which is -- it's basically verification. We might think of those as the same thing, at least for our purposes here. I worked a lot with that. For one I wrote a book on that. I have a dozen books I have written on communication systems but one of those books deals with securing networks with what is called 802.1X type of protocol.**

Now, you don't have to remember that name. It maybe have been even -- had a lot of different acronyms to learn but that -- 802.1X is a standard that's for -- provides a framework for doing authentication. So I have that book I have written, but I have worked on a lot of projects where the idea was to authenticate portable devices on the system to make sure that device is actually verified to one particular server.

For example, at Monarch Marking Systems we would authenticate/verify the Pathfinder when they connected to a server to get important inventory data that might be on the

server, inside the database.

Q. In your view are the terms "authenticate" and "verify" different or the same?

A. Well, verification is something done when you authenticate. So the idea of verification would be to confirm that something is what it is. When you walked in this morning, you probably had to show your driver's license, you are confirming who you are based on your name and if there is a picture, there is some way of confirming who you are.

Systems do that -- computer systems do that and in kind of a similar way. You are confirming that a particular device is the device that is represented by some sort of name or identification.

Q. And what experience have you had with writing software or using or writing software development kits?

A. Okay. That's a good question. I spent a lot of time writing software during my career so I need to focus on certain ones that maybe -- hopefully would be interesting. But I have been writing software, first of all, for about 40, 45 years. I started a long time ago back when we had Commodore 64s and those types of computers. I remember writing lots and lots of software.

At Monarch Marking Systems I wrote the firmware for that Pathfinder device. I designed the firmware myself

and there is a team that did the coding and writings of the instructions, the software, but I wrote that software.

Also with the Pathfinder -- this is again Monarch, mid-1990s, I was the one who architected the -- which APIs we would use. You've heard that term, application program interface, that APIs are generally parts of an SDK, the software development kit. I was the one who designed those and then wrote the code to make those interface with the Pathfinder and put the software development kit together as something we could give to customers. So I have done that.

I have also done that with -- this firmware development for probably 50 different products, different companies I have worked with as a consultant.

Q. And you mentioned that you wrote a book. So how many books have you written?

A. I think I mentioned that earlier but I have written, I believe -- it's around a dozen, I believe. One of my books has been translated, I believe, into 10 or 12 different languages.

Q. And in this case, how much of your analysis was done by you or by a team of people working for you?

A. I do not have a team of people. I work independently, and I have for the past 22 years.

MS. STERNBERG: Your Honor, at this time, I

Q. **Okay. So let's, let's kind of dig into the different -- the three different components and the three different devices involved in these claims.**

MS. STERNBERG: And so if we could go to the next slide.

BY MS. STERNBERG:

Q. **Let's start with the terminal as described in the patent. What is a "terminal" as far as the patent claims?**

A. **Yeah. Terminal, as you can see in the images there, could be a PC, just a general purpose computer. It could be a smartphone. It could be a laptop. It's some type of device that is something that you can use that you might even have at home that you could use for this particular -- to be a terminal.**

Q. **So back in the 2001, 2002, 2003 time frame, what was known about kind of computers or terminals at that time?**

A. **Well, they were very well known. I remember having a PC at home at that point. They're used in offices. They were very available.**

Q. **Okay. So let's talk next about the "communications network node." What is that as far as the patent?**

A. **Yeah. What that is, is actually -- we have been calling that a server. Now there are some claims that have**

a database element, that is where the database would be. The communications network node is going to be -- it will be, particularly here, a server that would be connected to the network.

Q. Okay. And what is known about servers in the early 2000s?

A. They were very well known. There are many different types of servers at that point or before. I was working on applications that would interface the servers at that point.

Q. Okay. And then let's talk about portable device on the left. So as far as the claims go, what it -- what does it mean by "portable device"?

A. Yes, portable device is something that you can pick up and move around. That's kind of what -- based on portable. You can see pictures of items here that would be portable. For example, a PDA device at the top left up there. It could be a phone that you see at the top right. There is a DiskOnKey that is imaged there. That is a type of portable device. A camera that is shown, a digital camera could be a portable device. Again these are items that you can pick up and move around.

Q. Okay. So back in the early 2000s, what was known about portable devices and particularly portable devices with processors?

A. **Yeah. Portable devices at that point had processors. All the ones that are shown in this picture would have some sort of processor. The portable devices I worked on at -- 2001, I would have been a consultant then. I worked on many projects that year and even before Monarch Marking Systems in the mid '90s there were portable devices that had processors.**

Q. **So what does its mean to have a processor, I guess? Take a step back.**

A. **That is probably a good idea. "There were processors" may not be quite as understandable maybe to -- although them you have learned a little bit about processors since we started the trial here.**

But a processor is sort of like the brains of the device. It's what going to be actually executing the instructions that you write. That's the software. The software would be instructions that are written. The processor is what is going to process those instructions. So it's going to take the instructions one at a time and perform whatever that instruction is supposed to be, what it was intended to do.

Q. **And so back in the early 2000s, what was known about the ways in which these three systems could communicate with each other?**

A. **A lot was known at that point. At that point we**

had ethernet, which was a type of networking technology. There was -- even USB was available. There was various ways to interconnect these devices so they could communicate with each other. There was Internet connectivity. We had ways of communicating amongst -- with each other. You might use email, like AOL or something, AOL email to communicate with each other. There is ways of connecting various devices together in a what would be called a network.

Q. Okay. So let's look at the claim language.

MS. STERNBERG: Let's go to the next slide.

BY MS. STERNBERG:

Q. Now we have in addition to the terminal communications network node, and portable device we have some highlights of program code. So what, again, do the three -- do the claims require that these devices actually do?

A. Okay. That's actually contained or at least named by the type of program code. And this is really important to understand. What we're dealing with, program code is actually software, those are instructions that are telling the computer what to do. So program code would be the software/instructions, going to tell the computer what to do.

But throughout the claims here, it's indicating certain, I would say nuggets of software or nuggets of

talked about the idea of the DiskOnKey. There is some other references that I looked at for an obvious, obvious type of deal. Or that type of analysis.

Q. Okay. So what -- so if you think everything is in the DiskOnKey, why do an obviousness analysis?

A. Well, one part of that could be if the DiskOnKey, if the software development kit is not considered part of that device or application, one of ordinary skill in the art would know it would be obvious to use it.

Q. So that is step one of your obviousness argument?

A. Yes.

Q. Okay. And then what else did you consider for an obviousness argument?

A. I also looked at publications of Elazar, who we saw speak today, earlier, a patent.

MS. STERNBERG: Okay. And if we could put up DX-363.

BY MS. STERNBERG:

Q. So do you recall that Mr. Elazar talked about this patent application in his testimony?

A. Yes, I believe he did.

Q. What do you recall about his testimony?

A. Yeah, that was just this morning. He talked about different ways to authenticate the device, you know,

related to his patent.

Q. So when you are talking about combining the DiskOnKey, like this patent, what part of this patent are you combining it with?

A. There were portions of this that dealt with different ways to authenticate, talking about the DiskOnKey.

MS. STERNBERG: So if we could move to page 3, paragraph 34 of this.

Oh, sorry. I think it's the PDF page 3.

Keep going. After the figures.

So at the bottom of page 3 and then it's going to go on to the next page as well.

THE WITNESS: I'll probably need that enlarged. I can't see that on my screen.

There we go.

BY MS. STERNBERG:

Q. Okay. And so what, what is this paragraph discussing?

A. Well, here he is talking about an authenticator implemented in a DRM device. That is his words, his phrase for a portable device, so that would be the portable device participates in a process of authenticating the DRM device to a remote server over a network. So then we have a portable device authenticating the DRM device.

So whenever you see, it says authenticating a

particular device to a device, it means that here, the services authenticating the device is making sure who it is, who they say they are.

And then he is also talking about here an authenticator being one of several methods of authentication, including sending a device ID number. Another thing here, he gives a description using an encryption secret key, and it goes on and he talks about other ways.

Q. So in your view, what would one of ordinary skill in the art understand from reading this?

A. That there are ways to verify the device; in other words, perform the authentication.

Q. And why would someone of ordinary skill in the art be motivated to combine this discussion with the DiskOnKey?

A. Because I believe that he's certainly one of interest on the DiskOnKey, and I believe it's mentioned in his patent there.

Q. And so why would somebody be motivated, I guess, to use authentication on a DiskOnKey?

A. Well, it's the idea of security. Security is always something you need to be concerned about, especially when moving data like that around, in a firmware case.

MS. STERNBERG: Okay. So if we can move on and